

REMARKS/ARGUMENTS

This Amendment is submitted in response to the Office Action mailed June 4, 2007. The deadline for responding has been extended to December 4, 2007 by a request for an extension of time made herewith.

I. Formal Interview Request

This is a request for an interview prior to the Examiner issuing a new office action. The Examiner is requested to contact Applicant's undersigned representative, Michael P. Straub, at 732-542-9070 to schedule the requested interview. This response is intended to serve as an interview outline as well as a response to the outstanding office action.

II. Introduction

Claims 23-39 are pending in the application. Claims 1-22 are withdrawn from consideration. Claims 23-39 are rejected. The claims have been amended to more distinctly claim the subject matter.

As will be discussed below, none of the pending claims are anticipated or rendered obvious by the applied references.

III. The Rejection of Claims 23-33 Should Be Withdrawn

In the Office Action the Examiner rejected claims 23-33 under 35 USC §102(b) as being anticipated by De With et al. (US 5,530,481)

Independent claim 23 is patentable because it recites the features indicated in bold below.

A video processing method comprising the steps of:

receiving encoded video data representing a series of images, **said encoded video data having been encoded using motion compensated prediction on at least some of the images being encoded, each encoded image in said series of images including a first predetermined contiguous image area and a second predetermined contiguous image area, each of said first and second predetermined contiguous image areas being smaller than a full area of an image in said series of images, motion vectors for the first predetermined contiguous image areas using for predictions only pixels within first predetermined contiguous image areas, each of said first predetermined contiguous image areas being located at the same location in each of said series of images, said same location having been determined prior to encoding;** and

decoding said received encoded video data.

It should be appreciated that claim 23 is directed to receiving encoded video data that was encoded in a specific manner, e.g., a manner that makes sure that a particular image area only uses for motion vectors which reference a corresponding image area which occurs in the same location in each of the series of images. The images areas recited in the claim are **predetermined prior to encoding**. Thus, the decoder can rely on the first predetermined image area occurring in the predetermined location regardless of the content of the encoded image.

The encoding constraint has the advantage that the motion vectors for the first image area will not reference other portions of the image. Thus, it is known that changes to the coded data corresponding to other portions of the image will not affect the decoding of the first image area.

This facilitates decoding and reduces the risk of errors particularly where changes to the encoded image data may be made, e.g., to insert or modify a portion of an image.

The constraint recited in claim 23 on the encoded image data and the motion vector limitation recited therein is not taught, disclosed or suggested by the applied reference. Accordingly, the reference fails to teach, disclose or suggest receiving encoded image data of the type recited in claim 23 and decoding the image data as recited in the claim. Accordingly, the rejection of claim 23 should be withdrawn.

The Examiner's rejection of claim 23 will now be discussed in further detail.

In rejecting claims 23-33 as being anticipated by the De With et al. patent the Examiner states:

Re claims 23 and 28, De With discloses a video processing device ... images including a first contiguous image area and a second contiguous image area (figs. 6A-6D), each of said first and second contiguous image areas being smaller than a full area of an image in said series of images, motion vectors for the first contiguous image areas using for predictions only pixels within first contiguous image areas (fig. 6B; col. 4, lines 58-67), said first contiguous image areas being located at the same location in each of said series of images (figs 6A and 6B); ...

A review of the De With et al. patent reveals that Figures 6A and 6D show possible modes of refreshing a search area in a motion compensator of the type shown in Fig. 5.

The text cited by the Examiner, i.e., col. 4 lines 40-67 state:

As regards refreshing of the search area, the motion compensator shown in FIG. 5 operates as follows. After the most corresponding block B.sub.pr of pixels has been searched in the search area, the motion compensator receives new block coordinates B(i,j). Four cases are feasible:

(i) The previous block coordinates were (i+1,j). The selection signal S then has the value L (left). Each multiplexer now couples the first input (L) to the respective sub-memory. Consequently, B1 takes over the contents from B4, B2 from B5, B3 from B6, B4 from B7, B5 from B8 and B6 from B9. Sub-memory B7 receives a new block I1 from the prediction picture memory, which block has the block coordinates (i+2,j-1) in accordance with the truth Table. B8 receives block 12 with block coordinates (i+2,j) and B9 receives block 13 with block coordinates (i+2,j+1). The shift of previously stored pixels and the storage of new pixels is summarized in FIG. 6A.

It should be appreciated that the above quoted portion of the reference which describes a motion vector search, does not discuss predetermined first and second contiguous image areas of the type recited in the pending claims where motion vector searching is constrained as recited in the claims or anything close to the motion vector limitations recited in any of the pending claims. Accordingly, the rejection of claims 23-33 based on the Dewith et al. patent should be withdrawn.

IV. The Rejection of Claims 34-39 Should Be Withdrawn

Claims 34-39 are patentable since the Xia et al. patent (US 6,014,466) does not disclose the features of claim 34 indicated in bold below:

A method of processing video data comprising the steps of:

receiving encoded video data representing a second image that was encoded as a function of a first image, the first and second images each including a first and a second non-overlapping image segment, each of the first and second non-overlapping image segments including a plurality of vertically contiguous pixels, **the first non-overlapping image segment occurring in the same location in each of the first and second images, the location of said first non-overlapping image segment being determined prior to encoding of the first and second images, said encoded video data representing the second image using as reference data from the first image, only image data corresponding to the first image segment of the first image, for motion vectors representing a portion of the first image segment of the second image and using as reference data from the first image, image data corresponding to the second image segment of the first image, for motion vectors representing a portion of the second image segment of the second image; and decoding said received encoded video data.**

In rejecting claims 34-39 under 35 USC §102(e) the Examiner asserts the claimed subject matter is anticipated by the Xia et al. patent. The Xia et al. patent describes an object based coding algorithm. The Examiner states in the rejection:

Re claim 34, Xia discloses „MPEG-2 encoding an image data based on the comparison of the first and second images, wherein the object 38 segment is the same location in both images by motion compensation (126 of fig. 12) ... (Office Action page 5)

Applicants note that simply because an object may occur in the same location in multiple images, it in no way anticipates or suggests "the location of said first non-overlapping image segment being determined prior to encoding of the first and second images" as recited in the claim 34 or the encoding feature recited therein.

It should be appreciated that the object may change location in the Xia patent and is not constrained to occur in a particular location in each image. Furthermore, the location of the image segments encoded in the manner recited in claim 34 being determined prior to encoding is not suggested by the applied reference. Accordingly, claim 34 and the claims 35-39 are clearly patentable over the Xia et al. patent.

V. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the pending claims are in condition for allowance. Accordingly, it is requested that the Examiner pass this application to issue.

Applicant's undersigned representative looks forward to discussing the application and pending claims with the Examiner during the interview which is to be scheduled.


If there are any outstanding issues which need to be resolved to place the application in condition for allowance **the Examiner is requested to call (732-542-9070) and schedule an interview with Applicant's undersigned representative. To**

the extent necessary, a petition for extension of time under 37 C.F.R. 1.136 is hereby made and any required fee in regard to the extension or this amendment is authorized to be charged to the deposit account of Straub & Pokotylo, deposit account number 50-1049.

None of the statements or discussion made herein are intended to be an admission that any of the applied references are prior art to the present application and Applicants preserve the right to establish that one or more of the applied references are not prior art.

Respectfully submitted,

December 4, 2007


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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (and any accompanying paper(s)) is being facsimile transmitted to the United States Patent Office on the date shown below.

Michael P. Straub

Type or print name of person signing certification


Signature

December 4, 2007

Date